TITLE 20 ENVIRONMENTAL PROTECTION CHAPTER 2 AIR QUALITY (STATEWIDE)

PART 66 COTTON GINS

20.2.66.1 ISSUING AGENCY: Environmental Improvement Board.

[20.2.66.1 NMAC - N, 04/07/05]

20.2.66.2 SCOPE: All persons who intend to construct or modify a cotton ginning facility as defined in this part, except as otherwise provided by this part. [20.2.66.2 NMAC - N, 04/07/05]

20.2.66.3 STATUTORY AUTHORITY: Environmental Improvement Act, NMSA 1978, Section 74-1-8(A)(4) and Air Quality Control Act, NMSA 1978, Sections 74-2-1 et seq., including specifically, Section 74-2-5(A) and (B), and Section 74-2-7(A)(1), (B), (C), (D) and (O). [20.2.66.3 NMAC - N, 04/07/05]

20.2.66.4 DURATION: Permanent.

[20.2.66.4 NMAC - N, 04/07/05]

- **20.2.66.5 EFFECTIVE DATE:** April 7, 2005 except where a later date is cited at the end of a section. [20.2.66.5 NMAC N, 04/07/05]
- **20.2.66.6 OBJECTIVE:** The objective of this part is to specify the best system of emissions reduction for cotton ginning facilities under the provisions of Air Quality Control Act, NMSA 1978 ("the act"), Section 74-2-7(O), and to assure that permits issued under this part assure the maintenance of national ambient air quality standards, in accordance with Section 74-2-5 (A) and (B)(1) of the act and the federal Clean Air Act, Section 110(a). [20.2.66.6 NMAC N, 04/07/05]
- **20.2.66.7 DEFINITIONS:** In addition to the terms defined in 20.2.2 NMAC (Definitions), as used in this part.
- **A.** "Bale" means a unit of measurement to denote an amount of lint cotton with a nominal weight of 500 pounds.
- **B.** "Class I area" means any federal land area that is classified or reclassified as class I as described in 20.2.74.108 NMAC.
- **C.** "Cotton ginning facility" or "facility" means any facility that separates seed, lint, and trash from raw cotton, and bales lint cotton for further processing, that will emit no more than fifty (50) tons per year of any regulated air contaminant for which there is a national ambient air quality standard, and that has the standard industrial classification code 0724 (cotton ginning) and the North American industrial standard classification code 115111 (cotton ginning).
 - **D.** "Department" is the state of New Mexico environment department.
- **E.** "Fugitive emissions" means those emissions that could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.
- F. "High efficiency cyclone dust collector" means any cyclone type collector of the 2D-2D or 1D-3D configuration. These designations refer to the ratio of cylinder to cone length, where D is the diameter of the cylinder portion. A 2D-2D cyclone would exhibit a cylinder length of 2 x D and a cone length of 2 x D, with a ninety percent (90%) efficiency for total suspended particulates. A 1D-3D cyclone would exhibit a cylinder length of 1 x D and a cone length of 3 x D, with a ninety-five percent (95%) efficiency for total suspended particulates.
- **G.** "High pressure exhausts" means the exhaust from all air handling systems located at a cotton gin that are not defined as 'low pressure exhausts'.
- **H.** "Low pressure exhausts" means the exhaust from systems at a cotton gin that handle air from the cotton lint handling system and battery condenser.
- **I.** "Non-attainment" means designated by the United States environmental protection agency as not meeting one or more of the national ambient air quality standards.
- **J.** "Opacity" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background.

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- **K.** "Owner or operator" is any person who owns or operates a process or process equipment at the source for which coverage under the permit has been granted.
- L. "20.2.72 NMAC" means the air quality control regulation 20.2.72 NMAC (Construction Permits); that is, Part 72 of Title 20, Chapter 2 of the New Mexico administrative code. [20.2.66.7 NMAC N, 04/07/05]
- **20.2.66.8** [RESERVED]
- **20.2.66.9 DOCUMENTS:** Documents incorporated and cited in this part may be viewed at the New Mexico environment department, air quality bureau, 2048 Galisteo Street, Santa Fe, NM 87505. [20.2.66.9 NMAC N, 04/07/05]
- **20.2.66.10 to 20.2.66.199** [RESERVED]
- **20.2.66.200 ISSUANCE OF PERMIT UNDER 20.2.72 NMAC:** The department shall not deny issuance or revision of an air quality construction permit under 20.2.72 NMAC to any cotton ginning facility, as defined in Subsection C of 20.2.66.7 NMAC, if the permit application and the permit conditions meet the requirements of this part.

[20.2.66.200 NMAC - N, 04/07/05]

- **20.2.66.201 PERMIT APPLICATION REQUIREMENTS:** Permit applications for each permit issued in accordance with 20.2.66.200 NMAC shall:
- **A.** meet all requirements for the contents of permit applications under Paragraphs (1) through (3), (5) through (15) of Subsection A of 20.2.72.203 NMAC and Subsections B through E of 20.2.72.203 NMAC;
 - **B.** state that this part is applicable to the cotton ginning facility;
- **C.** propose maximum allowable annual and hourly emissions from the facility, and include proposed limitations to hours of operations and other limitations that will result in allowable emissions of no more than fifty (50) tons per year of any regulated air contaminant for which there is a national ambient air quality standard; and
- **D.** include the proposed best system of emissions reduction for the facility, which for purposes of this part shall include at a minimum the controls, limitations, plans and practices set out in 20.2.66.202 NMAC. [20.2.66.201 NMAC N, 04/07/05]
- **20.2.66.202 PERMIT REQUIREMENTS:** Permits issued in accordance with 20.2.66.200 NMAC shall include the following best system of emissions reduction, as well as other conditions, including but not limited to recordkeeping, monitoring, reporting requirements, and test methods, as required to ensure the enforceability of permit conditions.
- **A.** Limitations from application: except as modified by the department, the proposed emission reduction system and limitations specified in the application.
 - **B.** Emissions control on high pressure exhausts.
- (1) All emissions from high pressure exhausts shall be controlled by the use of a high efficiency cyclone dust collectors (the terms high pressure exhaust and high efficiency cyclone dust collectors are defined in 20.2.66.7 NMAC).
 - (2) The opacity of visible emissions from cyclones shall not exceed twenty percent (20%).
 - **C.** Emissions control on low pressure exhausts.
- (1) All emissions from low pressure exhausts (as defined in Subsection H of 20.2.66.7 NMAC) shall be controlled by the use of screens with a mesh size of 70 by 70 or finer (United States sieve), or the use of perforated condenser drums with holes not exceeding 0.045 inches in diameter, or with equipment of equivalent or higher design efficiency, as determined by the department.
- (2) The opacity of visible emissions from low pressure exhausts shall not exceed twenty percent (20%).
- **D.** A fugitive dust management plan that includes the following, or methods at least as effective in controlling fugitive dust.
 - (1) Complete enclosure of all burr hoppers.
- (2) Measures to be taken to control fugitive dust emissions from any source, process or operation occurring within the cotton gin building to assure that no fugitive dust emissions to the outside atmosphere from any door, vent, or window are visible.

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- (3) Measures to be taken to minimize fugitive emissions from the handling, transportation or disposition of any substance or material that is likely to be scattered by the air or wind at the facility, including but not limited to materials in the gin yard and haul roads, including all open areas, right-of ways, storage piles, and vehicles at the facility. Such measures shall be sufficient to assure that no visible fugitive dust emissions generated from the property leave the property. Emissions may be controlled by watering, paving and cleaning, surfactants, or other equivalent means.
- (4) The posted speed limit for all vehicles on unpaved haul roads and in unpaved yard areas shall be no more than 10 miles per hour.
- **E.** Requirements for fuel burning equipment. This subsection applies to fuel burning equipment such as driers and humidifiers, but does not apply to mobile sources (such as loaders, haul trucks, and other vehicles).
 - (1) Any emissions from fuel burning equipment shall not exhibit greater than 20 percent opacity.
- (2) The owner or operator shall use only the following fuels: natural gas, liquefied petroleum gas (LPG), propane, or No. 2 diesel fuel with a sulfur content equal to or less than 0.05 percent by weight.
- (3) The owner or operator shall operate and maintain the equipment such that emissions and opacity limitations in the permit are met.
 - **F.** Location restrictions.
- (1) The distance from the cotton gin to the property boundary shall be at least ten (10) feet in all directions, or the distance established in Paragraph (2) of Subsection F of 20.2.66.202 NMAC, whichever is greater.
- (2) The minimum distance (in feet) in all directions from the cotton gin to the property boundary shall be calculated as the multiple of the square of the maximum emission rate (in pounds of PM10 per hour) and 0.2385, plus the multiple of the maximum emission rate (in pounds of PM10 per hour) and 54.0718, minus the value 816.0886.
- (3) The distance from the cotton gin to the nearest existing state park, recreation area, or school shall be at least 0.25 miles. The distance from the cotton gin to the nearest class I area shall be at least three miles.
 - **G.** Maintenance of equipment.
- (1) All materials handling systems and control equipment shall be installed and operated as required to assure that permit conditions will be met.
- (2) The owner or operator shall conduct daily visual inspection of the material handling systems for leaks, breaks or other visible signs of equipment malfunctions, and repair such leaks, breaks or malfunctions in a timely manner.
- (3) The owner or operator shall maintain a record of the daily inspections, including any equipment malfunctions discovered and corrective action taken to repair the malfunction.

 [20.2.66.202 NMAC N, 04/07/05]

HISTORY OF 20.2.66 NMAC: [RESERVED]

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